

Raccoon Roundworm

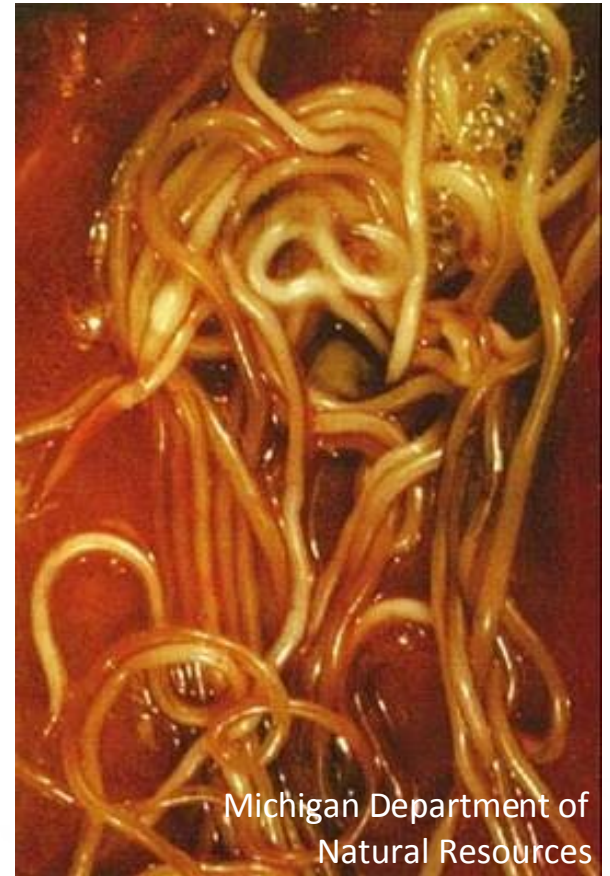
Meghann Cant

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Overview

1. What is it?
2. What does it do?
3. Why is it a problem?
4. What can be done about it?

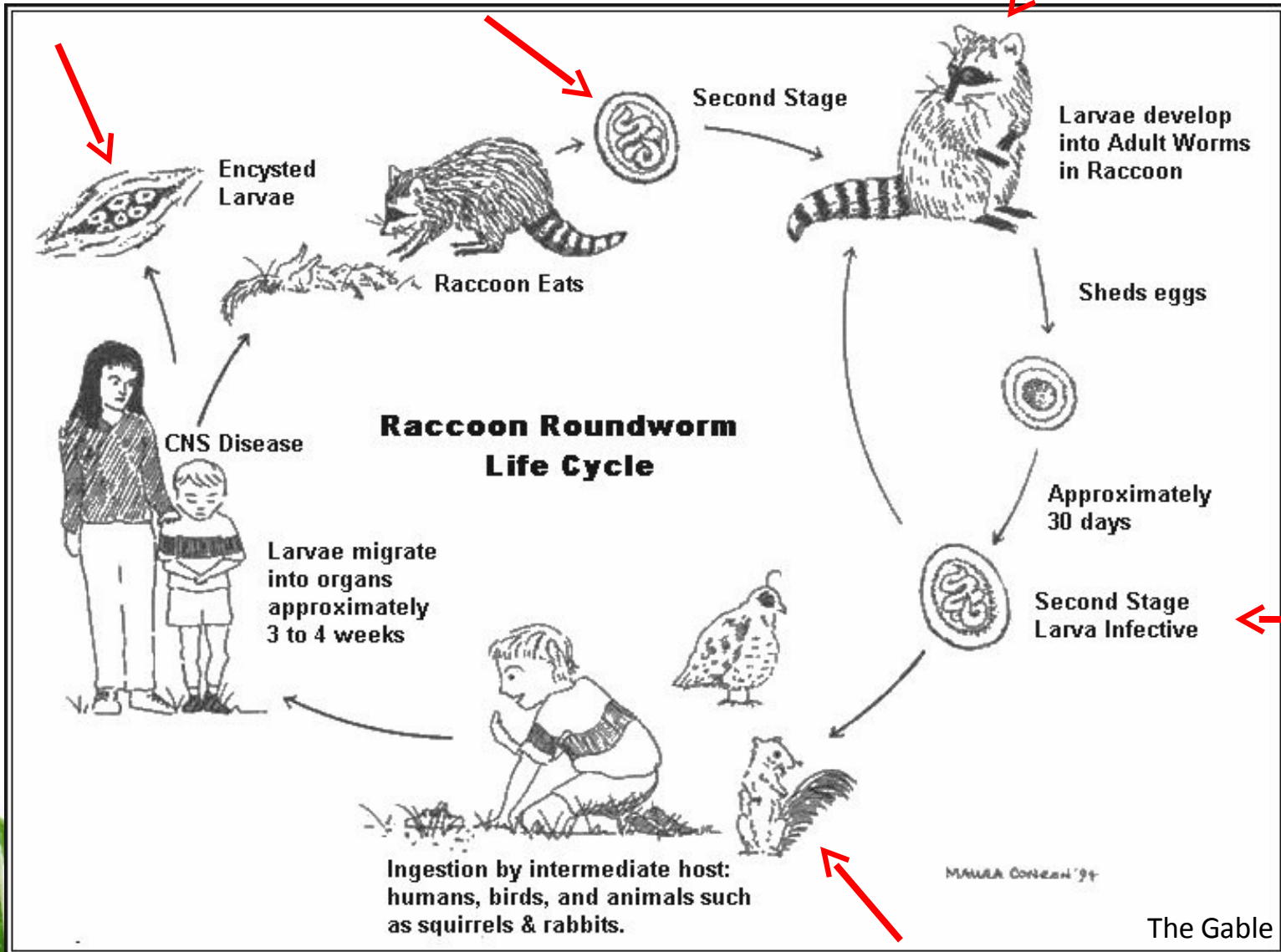


1. What is it?

- *Baylisascaris procyonis*
 - Nematode
 - Parasite
 - Family Ascarididae
 - Distinct species
 - Raccoons are its natural host



Life Cycle



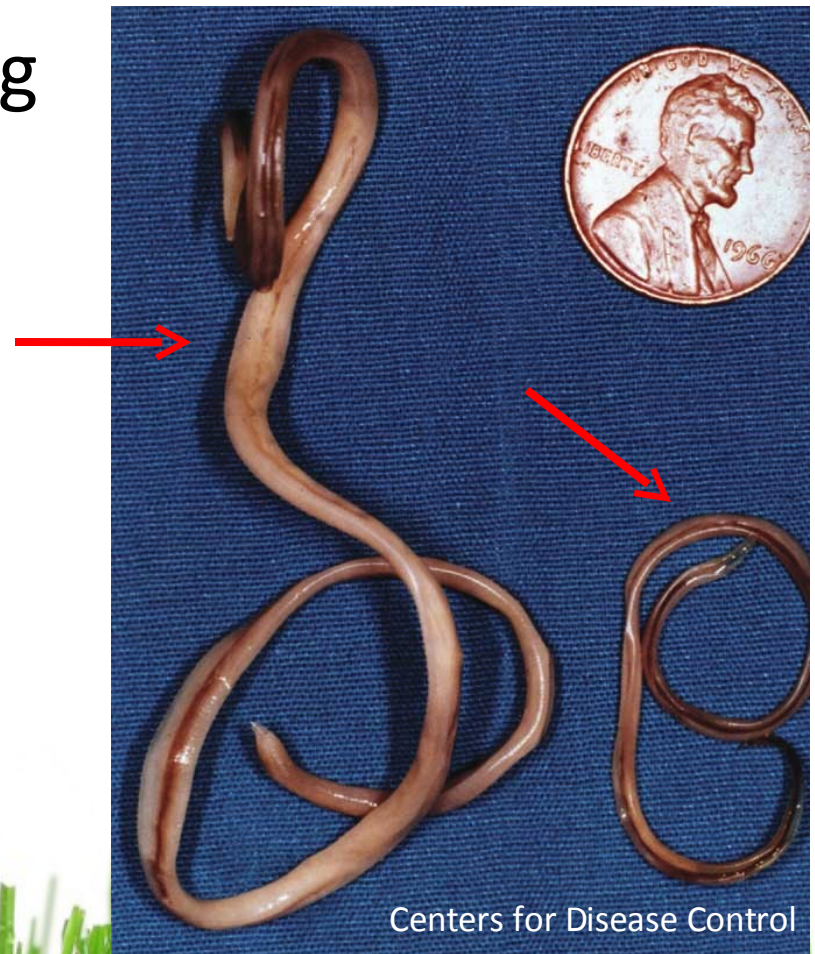
Eggs

- Thick, sticky shell
- Single-celled embryo
- 63 to 88 μm by 50 to 70 μm



Adults

- Females: 20 to 22 cm long
- Males: 9 to 11 cm long
- Reproduce sexually
- 115,000 to 179,000



2. What does it do?

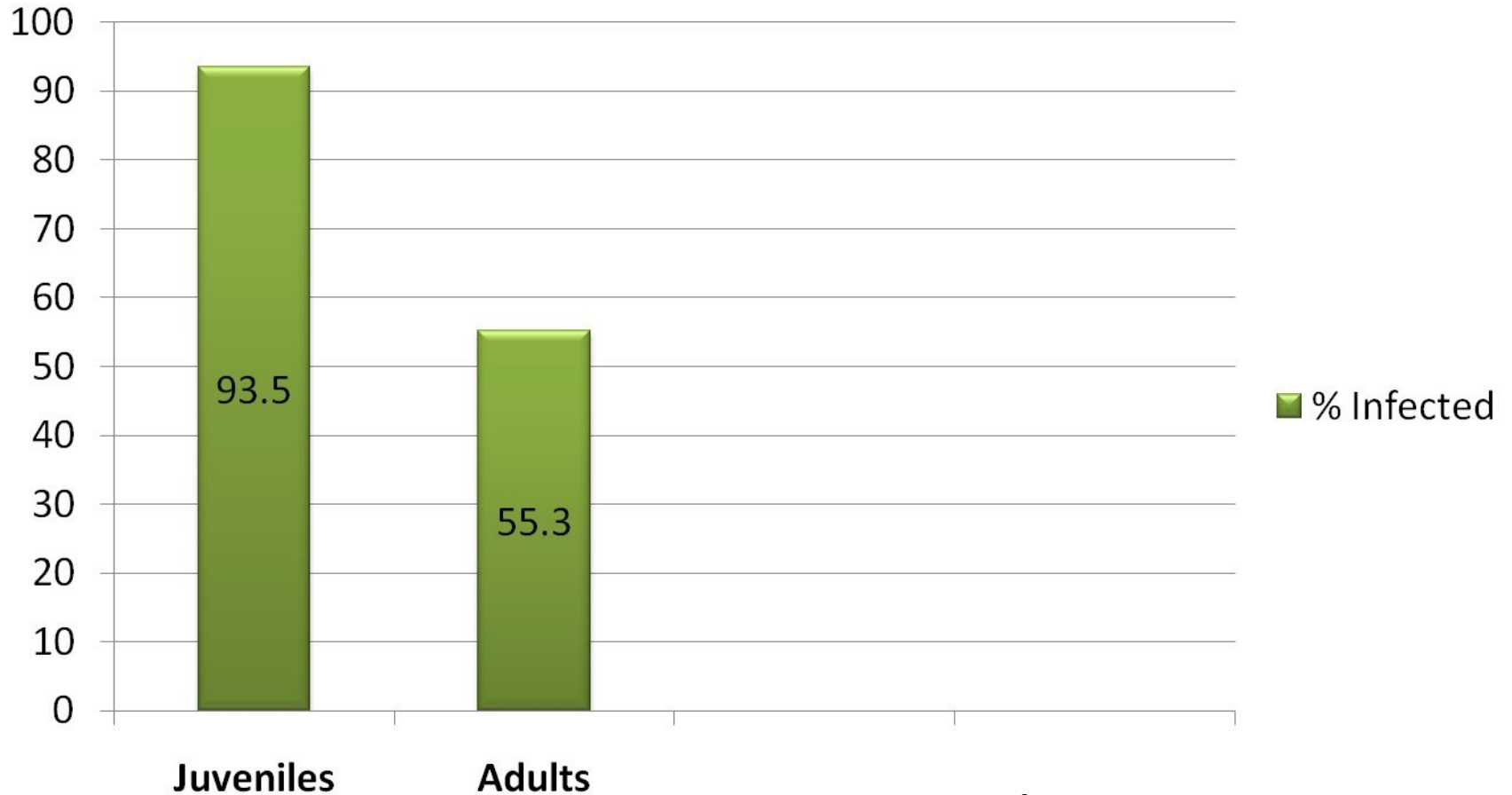


Scott Paulson

Raccoons

- Usually subclinical
- Heavy: 43 to 52 worms
- Juveniles: 48 to 62 worms
- Adults: 12 to 22 worms

Prevalence



(Gavin *et al.* 2005)

3. Why is it a problem?

- Zoonotic
- Average: 20,000 to 26,000 eggs shed/gram of feces
- Highest on record: > 250,000 eggs shed/gram of feces
- It only takes a few to cause disease!



Accidental Ingestion

Birds and rodents

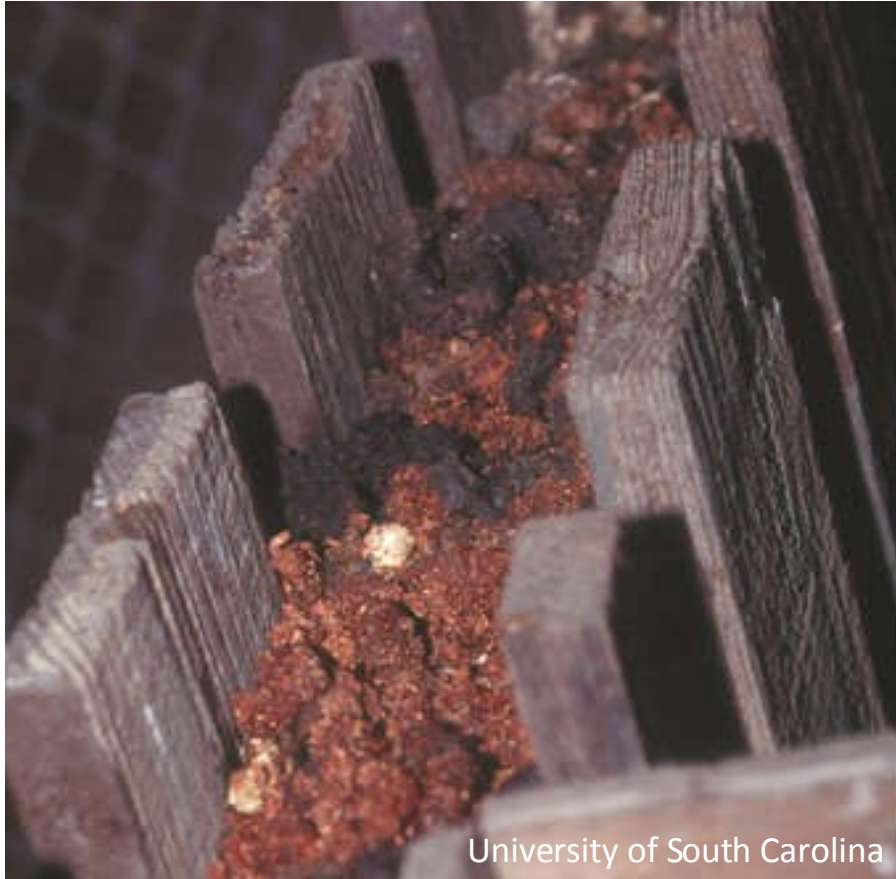
- Seeds in feces

Children

- Contaminated soil or water



Disease Potential

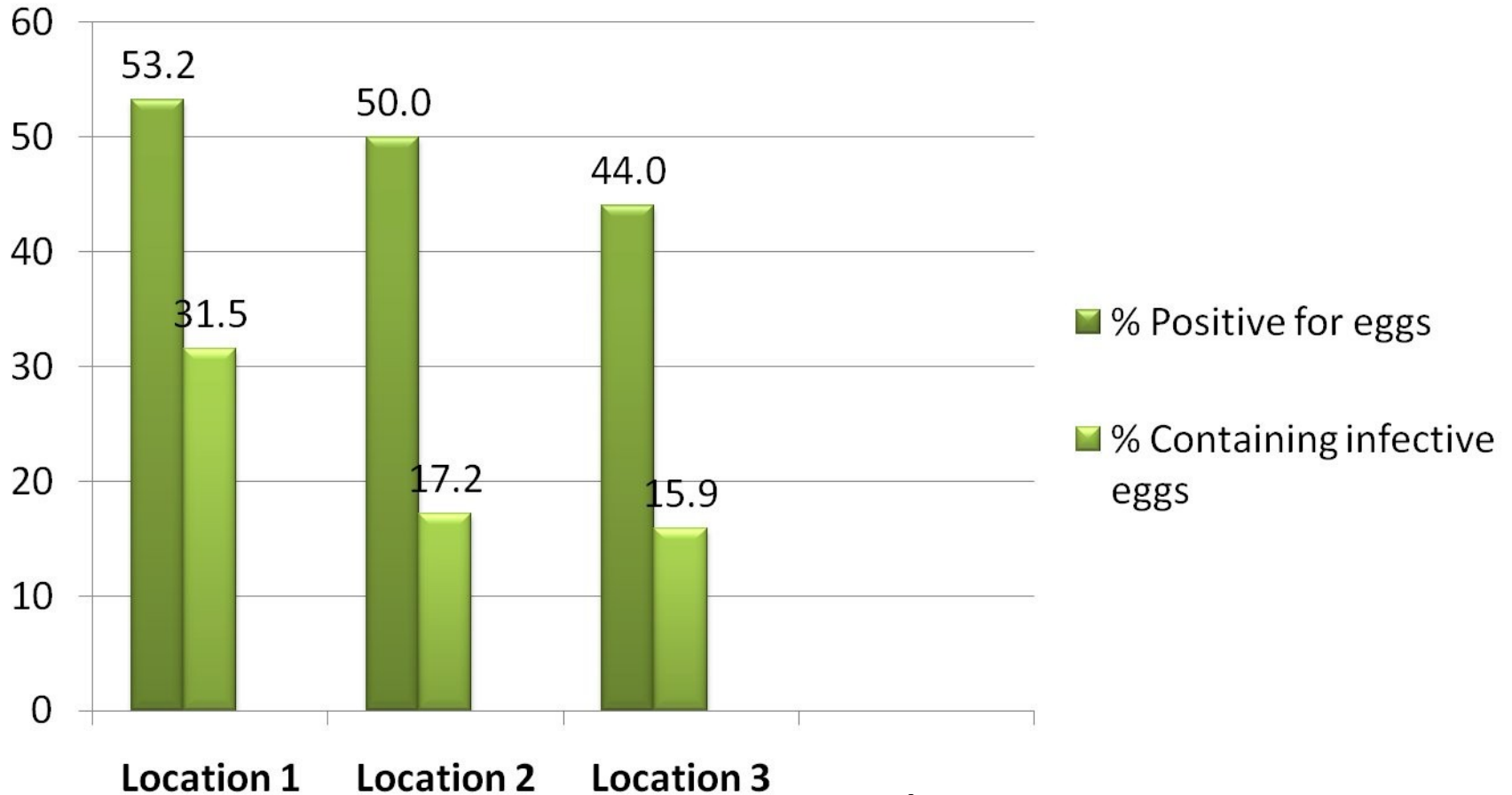


University of South Carolina

- Urban areas
- Latrines



Latrines



(Roussere *et al.* 2003)

Disease

- Dead-end host
- Visceral larval migrans
 - Liver, lungs, eyes, brain, spinal cord
- Ocular larval migrans
 - Eyes
- Neural larval migrans
 - Brain and spinal cord



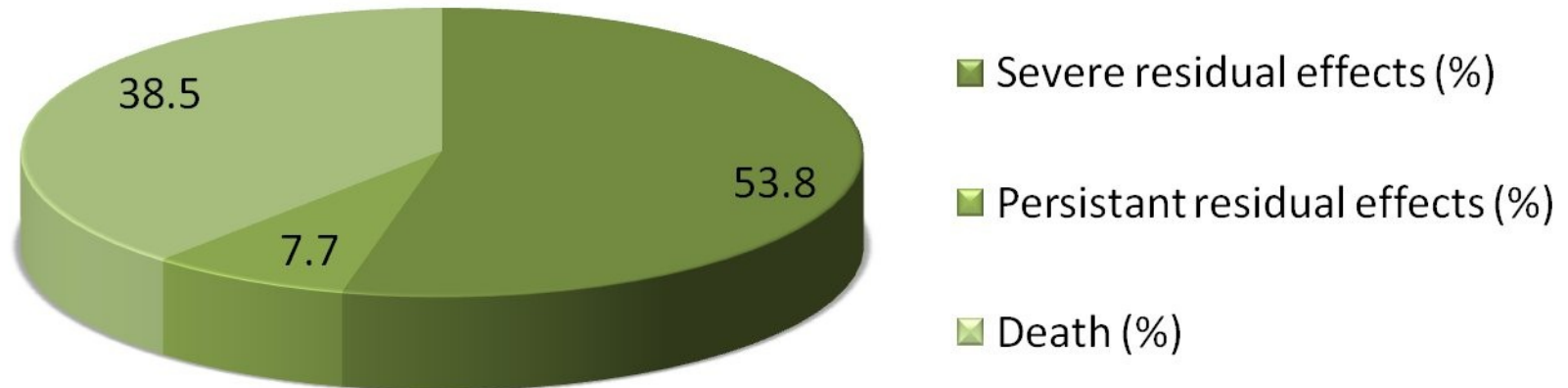
Symptoms

- Tiredness
- Nausea
- Loss of muscle control
- Blindness
- Paralysis
- Coma
- Death



Disease Incidence

13 Cases, 1980-2002



(Gavin *et al.* 2005)

4. What can be done about it?

- Eggs remain viable in the environment for years
- Disinfectants do not work
- High heat is effective, but often impractical



Critter Care Wildlife Society

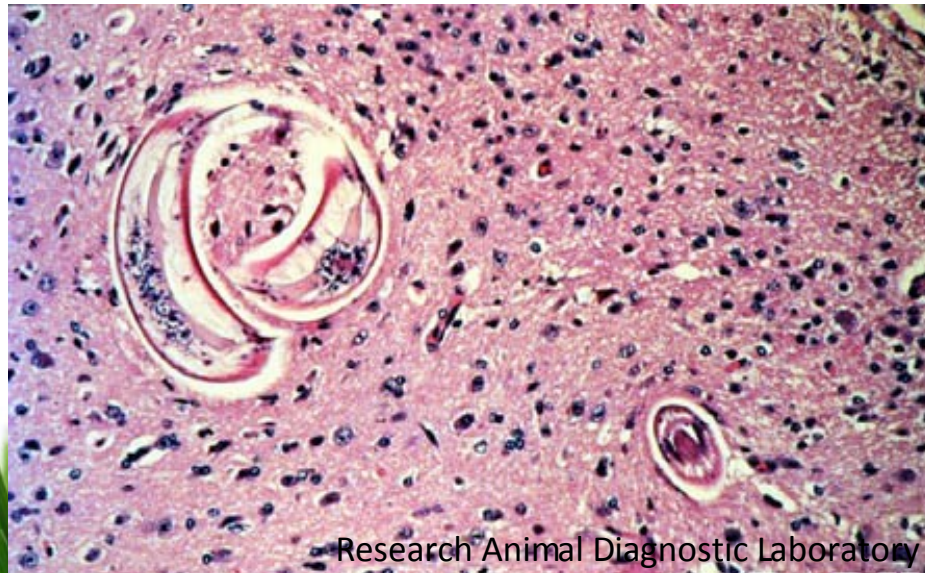
Treatment

Humans

- Albendazole and dexamethasone
- Start immediately

Raccoons

- Pyrantel pamoate
- Mebendazole
- Fenbendazole



Prevention

- Do not feed raccoons
- Use gloves, boots, and masks
- Follow quarantine procedures
- Dispose of latrines properly



Meghann Cant

Any questions?



Critter Care Wildlife Society